262 could be shaken off [as sugar].[122] A sugar was
137 made from the compressed pulp of a shrub fruit. Many other food plants mentioned by Pages would doubtless be identifiable by a botanist acquainted with the flora of the region.

264 Two meals were taken, one at sunrise, the other in the midafternoon.

283 String.--It appears that both hemp and nettle were used for making string, for, of the two plants, Pages says one grows in a moist soil and appears much like true hemp, the other, growing in dry soil, has "leaves like the walnut, ashy colored and downy, with a white flower."

276 Tobacco.--The plant was gathered in abundance and, ground with lime, was made into a paste and formed into "cones or small loaves" which were wrapped in tule leaves and hung in the house to dry. It was taken after supper, and one could subsist on it "for three days without nourishment."

Men kept their smoking tobacco, wrapped in leaves, in an antelope horn which they carried in their headbands. A most un-Yokuts-like practice is described: after supper "they set themselves to smoking tobacco, one after the other, from a great stone pipe";[123] that is, smoking after supper is Yokuts, the single great stone pipe is not. This indeed may be a truly southern Yokuts feature.

622 Chieftainship.--Like Powers, Pages attrib-
624 utes district chiefs to the Yokuts; one might have four or five villages, each with its own chief, under the authority of a superior "district" chief. The chief is said to be monogamous, to receive tribute in "seeds, fruit, game, and fish," to counsel on punishments with the advice of his constituents. The lesser chiefs kept their superior informed of events in their villages, of civil offences, and turned offender's over to him for reprimand. "During such an act of reprimand the culprit, whether man or woman, remains standing with

342 meantime the cover, whether thatch or mat, was prepared by the wife and other female relatives who had a personal interest in the dwelling. The lower layers of covering were tied on by women, but the upper layers, which could be reached only by climbing on the frame, were fastened by the man.

342 592 The size of the house depended upon the needs of the family, that is, the number of persons in the household and the amount of entertaining to be done. A chief, though perhaps having a small family, would always have a large dwelling because he was frequently visited. If decrepit relatives crowded a home, a small house, which was often little more than a hovel, would be built for them near by. (The ancient mother-in-law of one informant was living in such circumstances.)

342 In the Central Foothill section houses with a conical framework predominated. A house of any type was called ṭi', those covered with brush, ṭi yao'wil (yao'wil, brush or tall grass), those covered with tule, pu'muk (round tule). The name of the bark house was not obtained: Kroeber gives it as samish.[151] Among the Gawia and Yokod the tule-covered house predominated. The Wukchumni house was commonly brush- and grass-thatched, though tule was preferred when obtainable, as at Gutsnumi. For them, the bark house was rare, whereas the tule house was rare for the Patwisha, who used brush and bark coverings about equally. Kroeber states that the common Yaudanchi house, called te, had a conical framework and sewed tule mat covering, although the ridged house, with a fireplace and door at either end, was also known to them. They made use of a special species of tule called shuyo growing in the vicinity.[152]

The first step in building a house was outlining its circular area on the site selected. There is a difference of opinion among informants as to the hollowing of the floor: perhaps this feature varied with each builder's preference. Certainly the floor was never lowered more than a foot, but at least a slight cavity was made to brace the frame poles. For the conical house three oak poles were tied together near their tips and set up as a tripod. Two poles were closer to each other than to the third; these became the door frame, while the third was opposite, at the back of the house. Other poles were then leaned into the crotch at the apex; they were spaced 18 inches to 2 feet apart. The length of the poles depended upon the diameter of the house, which in the conical form was some 6 to 9 feet. The butts of [283] all poles were embedded in the ground at the edges of the floor cavity. They were held in place by horizontal bands of pliable willow bound on with ho'. The first was about a foot above the ground, others, of which there might

[151] Ibid., 522.

[152] Ibid.

291 ably it was of wildcat skin which was not split. In donning the garment, it was folded over the belt at the back, the belt being pulled tight and tied in front. As the clout hung thus at the back, the inner flap was about two-thirds the length of the outer. The outer, longer length (the clout proper, so to say) was pulled forward between the legs and forced up under the tied belt. There was sufficient length for the front end to hang in a flap of about 6 to [281] 10 inches. Wildcat skins did not allow for so long an inner length at the back, though this always had to come well under the buttocks or the clout would loosen and pull out at the back when the wearer stooped or sat. Powers states [834] that the breechclout was not removed during bathing, but none of my informants made any such claims to modesty.[159]

Men's dress.--It was not unusual for men to go entirely naked at any time. A loincloth [281] of deerskin (sep) is mentioned by Kroeber;[160] my informants spoke of its use on dress occasions but not as a daily garment.

283 The belt was of milkweed string woven
291 ("sewn") in the same manner as the burden band (fig. 13, c-f). This belt was 35 to 40 inches long, which allowed some 6 inches to hang down [301] after it was knotted. A belt for special dress had small beads (koi 'koi) inserted in its
291 strands and was called koikoi ''·č (fig. 13, g).
294 Today all such belts are woven on the bow loom
286 which was perhaps diffused through Spanish influence. A belt of milkweed fibre and red wool, woven on the bow loom but old style in effect, was worn by a Chukchansi informant.

291 A sandal (daki ''·č) of thick hide, deer neck or bearskin, was worn by men during very
294 hot weather or when making a long journey.
281 Several layers of hide were cut to the foot pattern, then slit at proper points, and binding thongs were inserted. Then the bottom or "sole" layer was added and all sewed together with sinew. Holes were punched along the edges with a fine, sharp, deer bone awl. The sewing was around the outside. Informants disagree on the position of the binding thongs.

291 Sandals were not worn by women. No type
281 of fibre sandal was known. Powers mentions sandals but does not describe them beyond saying that they were "very rude" and that elkhide was preferred. Kroeber speaks of "rude sandals of bear fur" which were used in winter. The statement by a knowledgeable pioneer that no foot covering of any sort was worn and that there was no Yokuts word for such an object is unquestionably an overstatement; yet it serves to emphasize the scarcity of footgear.[161]

[439] Moccasins were bought from the Eastern Mono. The attempts by informants to describe

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[159] Powers, 382.

[160] Handbook, 519.

[161] Powers, 375; Kroeber, Handbook, 519; Latta, Uncle Jeff's Story, 38.

285 taken up and tied in four places with long strands of string which were to be the twining wefts. The tules were added in pairs. Twining progressed over some six to ten tules in the first row before the string was tied in a single knot; then twining was commenced on the second, third, and fourth rows and continued in the same manner. The manipulation is shown in figure 12. While the first finger of the left hand held down one string which was turned back over the last pair of tules, the second and third fingers held the pair just being inserted by the right hand. The next move was to bring the loose string up over the latter pair, and have it replace the taut string which was released to become the next binding element. A well-finished mat would have a three-ply braid of fine tules sewed on all around the edge.

[516]

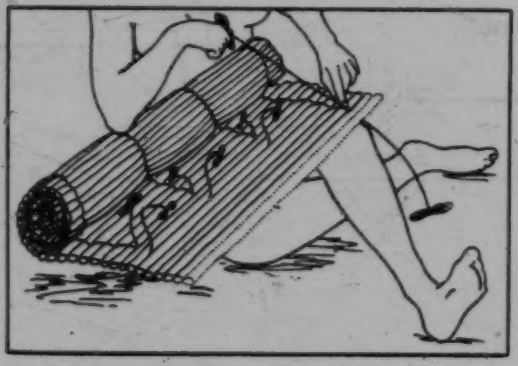

Fig. 12. Wukchumni method of twining small mats. Left hand about to press down on tightened wrapping, freeing right hand which will place next two tules (dotted in position) and pull under string up over them.

The same technique was used for all household mats, babies' mattresses, casings for feather ornaments, etc. Women invariably sat on mats when working outdoors in front of their homes (M.L.).

Flat tule (kots, "cattails") were little used.

Cordage and Nets

283 The strongest cord or rope (ho'), which was employed for all heavy purposes, was made from the inner bark of the button willow. Trees were ringed by means of an obsidian blade at intervals of three to five feet, depending on whether one or two sections could be gotten. The ringing and stripping were done in the fall. The inside bark peeled off readily after it was removed from the tree. It was laid out on flat

283 rocks without being allowed to dry, and pounded with a stone, then rolled on the thigh into a two-ply cord (see Michahai-Wakasachi, Pt. II, for fuller account of method). Making of cordage was a man's task throughout (M.L.).

A medium-weight cord was made of milkweed (ša'). It was used for wide carrying bands, tying cords, fish and duck nets, trap strings. Its manufacture is described by Kroeber for the Yokuts generally.[199]

[824] The commonest string material was milkweed, Asclepias, called shah or chaka. The stems were collected in early winter, the bark or covering peeled off, and shredded by rubbing between the hands. The thin epidermis was then removed by drawing the mass of fibers over a stick. The fibers were not separately disentangled, but loosely rolled together as they adhered. Two of these rolls were then twisted tight, on themselves as well as on each other, by rolling on the thigh with the spit-into hand, the other hand holding and feeding the loose ends. The exact process of adding further material is not known; it consisted probably of rubbing together the ends of a mass of fiber, perhaps with some twist. String was two-ply.

[824] Another and finest string (čitːk) was made of hemp or dogbane. This was used for the ordinary narrow tumpline, carrying and head nets, belts, bead stringing. M.L. said ho' was willow, ša', milkweed, and čitːk, nettle. Neither the "hemp" nor "nettle" was identified by the recorder.

482 The carrying net (waˊdak) and tumpline
283 (šu ñdːč, any rope or band for carrying burdens) were always made of hemp (?) according to M.P. and J.P.; other informants (M.L. and S.G.) say that the finer grades of milkweed twine were used (fig. 13, a). Women always placed the tumpline across the upper forehead, occasionally wearing a coiled basket cap for protection. Men placed the burden strap across the upper chest and deltoid muscles (see vignettes, fig. 13). Bundles were never carried on the head and seldom in the hands.

286 Formerly the making of straps and nets was a man's work. A carrying net was begun by coiling a length of cord around the left hand four or five times and tying the ends together, forming a ring about four inches in diameter. (The dimensions herein are those of an ordinary carrying net owned by the informant, M.P.) This was fastened to a ramada post, a tree, or any convenient place at about the shoulder height of the maker. The twines used were always of double thickness. That is, a length of twine was chosen and its center point thrust into the split end of a wooden needle: the two dangling ends were rolled together on the thigh to form a single length of twine. The open end was fastened to the rope ring with a few half-
[284] hitches; then the netting stitch began.

[199] Handbook, 534.

[text continues on p. 85a]

286 was being formed. The process was continued as far as desired, say some 3 feet, bringing the worked part to within about 2 feet of the ends. The very loose twisting there permitted the 8 cords (of the 4 doubled warp cords) to be laid side by side, and the weft cord was drawn through the original turns in these two-ply cords, making a finer but equally broad textile (fig. 13, f). This continued for 6 or 8 inches; then the weft cord was broken off at a length equal to that of the warp cords. There were then 9 strands which were grouped into threes, braided together to the end, and tied with a couple of final knots.

At the opposite or closed end were the loops which had been left in the cleft stick at the start. A weft cord was inserted a few turns below this, then worked up, turn by turn, until the beginning of the loop was reached. From here on the weft was carried through the original turns in the 2-ply cord, as at the other end, until the loop was woven solid. When finished, this loop was about 3/4 of an inch wide, the band itself about 1-1/2 inches. The loop end was fastened to the carrying net by means of the cord rings, as mentioned above. The free end of the tumpline was tied to the opposite cord ring of the net and adjusted as need demanded.

[302] Headnets were made of fine milkweed twine, presumably by the same technique as the coarser carrying net. The only one seen was a Choinimni specimen made of grocer's string.

286 291 Belts were worn by both sexes for supporting the breechclout, a plain variety for ordinary use, a beaded form for gala dress. The technique was the same "sewing" process, but the looped end was cut open and the ends grouped in threes and braided as at the loose end. The fancy belt was made of the finest milkweed cord. The weft thread carried a clamshell disk bead at each point between the warp (see fig. 13, g). Such a belt was called koikoi''ič, in reference to the beads.

283 Sinew string (pikit) was made only by men. Its most notable use was for bowstrings; other uses were the feathering of arrows and fastening of arrowpoints, the tying parts of fish spears and harpoons, wrapping feathers on earplugs, sewing hide, tying the umbilicus stump. For the method of manufacture see Michahai-Waksachi (Pt. II).

Basketry

285 [12] Practically no information on basketmaking was taken, since the art was in no danger of extinction and it was hoped that some investigator would undertake its special study. Yokuts basketry technique was highly refined, and the Wukchumni today still produce some of the finest examples. Some general remarks on Yokuts basketry are made by Kroeber, and their

264 Meals were irregular, save for a late afternoon supper just before sundown. Snacks were taken by workers as they came home from tasks away from the village. Mayfield claimed all persons ate from a central basket by dipping in three fingers, but used small baskets for drinking.

227 Traps and weapons.--The fish trap was a cone-shaped net of milkweed fibre. Its round mouth gaped in a weir facing upstream; the fish were driven downstream into it. In shallow pools fish were caught by wading in and pouncing an open-bottomed basket over them; they were then extracted by putting a hand through the opening.

A double-pointed harpoon, one tip of which was detachable, is described by Mayfield; the pole handles were often 20 feet long. A scaffolding was constructed to spear the fish from: two poles, crossed like shears, were set butt down in deep water 10 to 15 feet from the bank, the crotch about level with the land. In this crotch were lashed the tips of two long poles whose ends rested on the bank and were some 10 feet apart. Across this frame were laid poles and leafy branches, amongst which the fisherman lay face down. As he could see fish in the shady water below, he speared them through an opening between the poles.

411 Mayfield, when a lad, was given a fine sinew-backed bow. This was about 3-1/2 feet long, wide, flat, with handgrip in center and recurved ends, and was "painted in pretty [283] colors." The string was of sinew, tied at one end and looped at the nocked end, which was unfastened when not in use. These bows were all [439] bought from the Monachi by the Choinimni and [463] taken back to them for repairs, in fact, to a certain skilled individual north of Sycamore Creek.

The Choinimnis' own simple bows were without recurved ends.

411 Excellent details of hunting, of the making of weapons, etc., are given by Mayfield 224 in a passage too long to reproduce here. The essential points are: arrow release with two fingers, three fingers for heavy bow; arrows with obsidian-tipped foreshaft for warfare and heavy game, hardwood foreshaft for light game; simple arrow for practice; bird-arrow tipped with four cross-pieces; foxskin quiver; the pigeon booth (see Michahai below); and the deer disguise. Deer and elk were snared, but the method is not described.

291 Clothing.--The man's breechclout was ten inches wide, cut from a full length of deerhide, held in place by a buckskin thong over which the clout was doubled at the back and over which the two front ends hung in a flap. Women wore a "rabbit skirt woven together like the blankets." This consisted of two knee-length aprons, the larger one in front. Cougar skins were worn about the shoulders in cold weather. Mayfield claims footgear was unknown.

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1: Gayton E-5 (1925-1930) 1948 N529 Yokuts N529
[P. 147 a] Choinimni

Both sexes wore the hair long, banged across the forehead by women, parted in the middle and held back with eagle-down cord by men. Women tattooed their chins, and a few wore a bone through the nasal septum; both sexes had pierced ears. Men plucked beard hairs with split-twig tweezers. The hair was brushed with a soaproot brush which had curved tips on its bristles. White paint put on over red paint was used ornamentally.[8]

A hairnet served as the foundation for feather head ornaments, the usual ču and sema, but it was also used by any man who wanted his hair held compactly for practical purposes. P.D.W.'s net, made of grocery string, is now University of California Museum specimen no. 1-27001. The method of putting on the net is as described for the Central Foothill region and shown in figure 7, Part I.

MISCELLANEOUS DATA

Means of transport.--As with all Yokuts dwelling upon the lakes, sloughs, rivers, and creeks of the San Joaquin Valley, the Choinimni were expert swimmers. [illegible] were immersed in icy waters before they [illegible] to walk and learned to swim from that time. A swimmer in the San Joaquin used "a long overhand stroke."[9]

The Choinimni at Sycamore Creek made small tule rafts for use on the river near their village; these carried one or two persons.

The large barges of tule, made for the journey to Tulare Lake, were constructed in sloughs about ten miles downriver from Sycamore Creek. These were 50 feet long, of three long separate bundles bound with willow withes; the two outer ones were raised slightly as a sort of bulwark above the level of the center bundle. Each end of the boat was pulled up 2 to 3 feet higher than the deck. Along the center was piled all the equipment, which "included mortars and pestles, baskets of acorns, acorn bread, seeds, meat, skins for bedding and many other things." Eight to ten persons, usually of one or two families, sat along the sides while four men stood and poled, though this was mainly for guidance as the river current carried the craft. The return trip was made toward summer while the river was still high enough so the boats could be poled upstream to the original point of departure. From there the dunnage was carried afoot up to the village at Sycamore Creek.[10]

According to Jeff Mayfield, the carrying net of milkweed twine was used to support the conical burden basket on the back, though it is implied that this was done only with an excessively heavy load, such as acorns. Occasion-

[8] Ibid., 16, 17, 23, 26, 27, 38, 39, 40-42.

[9] Ibid., 29, 12.

[10] Ibid., 29-31, 37.

[P. 189 9] Chuckchansi

283 Cordage and nets.---Milkweed plants were gathered when dry and the bark on the stem stripped off, said J.R. This is easily accomplished when the plants are dessicated. To spin this into string, two strands of the inner fibre were held between the thumb and forefinger of the left hand, while the loose ends were held on the left (sic) thigh under the palm of the right hand. As the right hand rolled the fibres forward, the left or gripping fingers twisted it along [in which direction?].

This string "never breaks"; long strings were made by tying short ones together.

286 The carrying net was made of milkweed twine. J.R. described it as "with strings at the four corners, by which it could be gathered together, to carry on the back by means of a tumpline." The net was made "by tying two strings to two sticks equal distances apart (to make a fabric 18 in. to 2 ft. wide) and tying other strings to these first two about 2 inches apart." (The recorder doubted that J.R. had seen a net made in many years.) [J.R. may have been describing the fine mesh bag of Miwok type, which may have been used by the Chukchansi rather than the coarser Yokuts type of carrying net.[107]]

283 According to N.W. a string called s'atip was made of the bark of "trees with yellow flowers, just like those apple trees, I think they are, straight, tall, with bunchy branches like almond trees." The flowers grow up the stem "just like hollyhocks, that size, but yellow." The bark was taken in two-inch strips off straight trees selected for the purpose. -- [Fremontia? -- A.H.G.]

283 Woven sacks were made in which pine nuts
286 were stored, said N.W. These were made of milkweed string cloth, woven by the same technique "as the string that holds the baby in the cradle," and sewed up the sides. No dimensions were given; a big wide piece was woven (sic).[108]

281 Rabbitskin blankets.---Rabbitskins were torn into strips and woven into blankets almost as large as modern bed blankets. The feet and tails were fastened around the edge, said N.W. No informant could describe their manufacture. Such blankets were expensive and owners did not want to sell them. In sleeping, one lay under them, did not roll up. Not many rabbits were [134] available at Coarse Gold; most were obtained in the foothills at the valley's edge, said J.R.

412 Woman's equipment.---The digging stick (ɛ'opu[1]) was 3 to 6 feet long and 1 to 2 inches

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[171] [107] Barrett and Gifford state that a netted bag was used by the Central Miwok, and imply that a carrying net for large burdens was not employed (Miwok Material Culture, 247, 196).

[171] [108] The technique for making tumplines was not described. Presumably it was like that of the Wukshumni (see fig. 13, Pt. I) particularly as the Miwok method is identical (ibid., pl. LXVI). It would be possible to make a cloth in this manner, but further evidence is needed before N.W.'s statement can be credited. -- A.H.G.

1: Gayton E-5 (1925-1930) 1948 NS29 Yokuts NS29
[P.226b] Western Mono NS25

W Y 281 [237] 283

Cordage and Nets

Sinew cord (ta´mowi´ wi·š·b) was made only by men. Sinew from deer leg and back was saved and dried. When wanted for use, it was soaked in water, then pounded between two stones. A man often used his arrow straightener for this if he had one. The material was worked over with the fingers, smoothed, and finally separated into filaments.

To make cord used primarily for bowstrings and arrow tying three fine strips of sinew of differing lengths were knotted together evenly at one end. The knot was held in the left hand, and the three strands, well separated, lay on the right thigh under the palm of the right hand. The first movement was toward the body: the left hand held the strands taut while the right hand rolled them up the thigh. The left hand then relaxed, which permitted the knot end to roll up. It was drawn tight again. The right hand then rolled the string, which in the portion between the two hands was now a single 3-ply cord, forward down the thigh. This completed the cycle of movements which produced six to twelve inches of cord. The pressure of the right hand was not relaxed from start to finish. The movement of the hand was not straight back and forth. On the back stroke it was a rotating movement, the thumb side of the hand moving but slightly while the outside described an arc. The forward stroke was straight.

The next section of sinew was treated in the same way. The left hand grasped the cord just above the point where the three strands separated. New strands were spliced, i.e., rolled in by overlappings, never knotted. As the basic strands were of different lengths, only one need be spliced in at a time, which not only was easier to handle but obviated excessive thickening in the cord. The strand to be spliced was always placed in the center of the trio as they were rolled up the thigh.

W Y 283

Milkweed string (wi´šib·b wiši´bi; milkweed, wi´šib·b, Waksachi; če', Michahai) was made only by women. B.O. thought this string was all 2-ply, but was not certain. Milkweed plants were laid out in masses on bedrock mortars to dry. The stems were then sprinkled with water (not soaked) and pounded. The fibres were smoothed down with the fingers. The rolling process for making it into string was exactly like that for sinew cord.

A coarser cord called sa´hap (the Yokuts ša') was also made of willow bark by Waksachi.

W Y 482

The carrying net (tapi´h·) and tumpline (ta·´wap) were made by women, said B.O., but were most used by men. Women carried the line over the head and in so doing used the coiled basket cap (pi·´kuoë) which they never wore at any other time. Men placed the line across the chest and deltoid muscles. Any objects which the net could contain might be carried in it. The material and process of manufacture

2: Kroeber E-5 (ca. 1918) 1953
NS29 Yokuts NS29

283 The commonest string material was milkweed, *Asclepias*, called *shah* or *chaka*. The stems were collected in early winter, the bark or covering peeled off, and shredded by rubbing between the hands. The thin epidermis was then removed by drawing the mass of fibers over a stick. The fibers were not separately disentangled, but loosely rolled together as they adhered. Two of these rolls were then twisted tight, on themselves as well as on each other, by rolling on the thigh with the spit-into hand, the other hand holding and feeding the loose ends. The exact process of adding further material is not known; it consisted probably of rubbing together the ends of a mass of fibers, perhaps with some twist. String was two-ply. This is a practically universal rule for California. Except for a few ancient fragments, every piece of three-ply rope or twine in the State is of American provenience or obviously modern.

The other great string material of the bulk of the Californians, wild hemp, *Apocynum*, has not been reported from the Yokuts; but this is likely to be only an oversight. The inner bark of a large shrub called *hoh* was made by the Yokuts into rough rope for withes, pigeon cages, and similar bound articles.

CRADLES OF THE YOKUTS AND OTHER CALIFORNIANS.

854 352 285 The Yokuts cradle shows three types. The first is a flat rectangle or trapezoid of twined basketry with a curved hood. The hood is loosely or not at all attached to the top edge of the base, and is carried by a basketry hoop or side supports. (Pl. 40, *h*, *i*, *j*.) This type is found also among the western Mono, and, with some modification, among the eastern Mono. (Pl. 40, *k*.) The latter run the rods of their base across instead of lengthwise, and set a smaller and rounder hood on more snugly. The Miwok (Pl. 39, *a*, *c*, *d*, *e*) and western [171] Mono (Pl. 40, *l*) sometimes use the base of the Yokuts, without the hood. The Washo cradle is substantially that of the Yokuts.

The second type is built up on half a dozen sticks lashed across a large wooden fork. A layer of string-twined tules is put over the sticks. (Pl. 40, *m*.)

The third form is a mat of twined tules, with loops at the edges to pull the lashings through. (Pl. 40, *g*.)

The hooded basketry cradle seems to predominate in the north, the forked stick type in the south, and the soft frameless tule form on Tulare Lake; but this distribution is not altogether certain, and it is possible that the age of the child, or the season of the year, may have been of influence.

[171] The Maidu cradle is often made on a forked framework, and in summer carries a basketry hood. It differs, however, in carrying numerous light transverse rods, in having the ends of the fork united

3: Latta Y-5 (1923-1948)1949 NS29 Yokuts NS29
Yowlumne

as the Kaweah River and Tejon Canyon, back of present Tejon Ranchos Headquarters. 796 574

YOWLUMNE BOWS AND ARROWS

The Yokuts Indians of the San Joaquin Valley had probably developed the science of hunting with the bow and arrow further than had most Indians. The Yowlumne, of Kern River, were foremost among the Yokuts in this work. At least three types of bows were made. The most common of these was a bow made of elderberry wood. On first thought it would seem that this material would be the most unsuited of any, but it makes an excellent bow. It can be secured in long, straight, clear staves and can be made into as heavy a bow as is wanted. It has a smooth, strong cast, which it does not lose for many years. 411 824

I once carelessly put a strung elder bow in a closet and did not discover it for more than a year. I unstrung it and stood it in a corner near my desk. In twenty minutes it was as straight as ever and had as good a cast as when it was first made. Elder-wood bows were easily made and were used exclusively in the San Joaquin Valley by boys for hunting all kinds of small game, and even by men for hunting antelope, deer, and elk. Strings for these bows were made of either hemp, sinew, or milkweed fiber. [283]

Good bows were made from native laurel, or bay wood. This tree grows in the Sierra in clumps of many small, straight trunks. It is easily split into staves, which are stronger for their size than those made of elder-wood.

Aged Yowlumne Indians state that the Frémontia of the Sierra can be used to make a complete hunting weapon—bow, string and arrows. They say that the bark can be stripped off and twisted into a good string. The large branches can be split into staves and the small, straight branches made into arrows. With a few primitive tools a disarmed Yowlumne in a few hours' time could manufacture a complete hunting weapon. [283]

The finest Yokuts bows were made of juniper and were backed with sinew. Juniper staves were traded from the Monache, or Piute to the east, or were secured in Yokuts territory in the upper Coast Range mountains. Bows of juniper were shorter than those made of other woods. They required more skill and labor to produce and were highly valued. [439]

3: Latta Y-5 (1923-1948)1949 NS29 Yokuts NS29

[P. 74 not Processed]

CHAPTER IV

DRESS AND COMMUNICATIONS

YOKUTS MEN'S DRESS

291 If one is expecting a lengthy and detailed account of an extensive wardrobe worn by the various Yokuts tribes, he is doomed to disappointment. In dress they are often unfavorably compared with the Great Plains Indians. To do justice to these people, however, it must be known that the Great Plains Indians, with the exception of a few members of each tribe, did not appear as we are in the habit of seeing them pictured.

291 114 Probably the motion picture has been most responsible for the misinformation which has been spread about Indians. Pictures have been made in which we are assured that as many as two thousand Indians have been employed in the cast. From what one sees in the picture, one would never know but that every tribe was composed of at least nineteen hundred and ninety-nine chiefs and one common, ordinary Indian.

291 The elaborate dress and head dress which is so commonly placed upon the pictured Indian was worn by probably not more than six men in a tribe of two thousand Indians. Another Indian of that tribe, when he was not entitled to it, would have taken his own life before he would have placed the head dress of a chief upon his head.

The common citizen of the Great Plains tribes did not appear a great deal unlike the average Yokuts Indians, the principal difference being that the San Joaquin Valley natives were shorter and heavier and generally wore no foot covering of any sort. When the Spanish brought horses, hats and boots among them, they took the Spanish words for those articles and still use them when speaking their own language.

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302 The men wore their hair long, but probably did not braid it until after they became acquainted with white people. They bound their hair into two coils somewhat resembling braids. These hung in front of the shoulders over each ear. Most often the hair was allowed to hang loose, being thrown back over the shoulders. It was held in place by a string wrapped around the head just above the eye-brows. This string was generally made from the fiber of the milk weed, and had woven into it sacred down from the breast of the eagle, or from the red-tailed hawk.

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travel uncomfortable were brought by the white man. It is probable that in some instances, particularly in rocky, brushy country, some sort of moccasin was used.

It is interesting to pass along the roads of the San Joaquin Valley with the Indians of the older generation and have them point out the plants which came with the white man and those which are "old timers." Among the introduced plants are fox tail, cockle burrs, Spanish thistle, puncture vine, sand burrs and many others, any one of which would have forced into the language of all Yokuts Indians a word for some sort of foot covering.

YOKUTS WOMEN'S DRESS

As regards dress, the Yokuts woman was, until the year just passed and the coming of the "new look," quite modern, short skirts and no stockings having been in style for many years before Hollywood modes were adopted. Painting was not unknown, although it was often done in permanent form by tattooing.

The Yokuts women often wore bangs and allowed the remainder of the hair to hang loose over the shoulders, or gathered and tied it behind the neck. Young unmarried women are said to have made themselves more attractive by separating the hair at the back and forming it into two wrapped coils, bound by strings of beads or other bright ornaments. This practice was called *pin-ke'-itch*. They sometimes wrapped string around their heads and stuck feathers under it at the back of the head. In this they followed very closely the ancient customs of their red sisters throughout America.

When in mourning for a brother, sister, father, mother, husband, or grandparent, it was in some tribes customary for Yokuts women to bob their hair. It was cut off short across the back, sometimes by means of a piece of glowing sycamore bark, the hair being clamped between the parts of a split stick. They called this operation *hu-pahn'-mau*. [during the period of mourning there was a tabu against washing, or bathing and the eating of meat]. The hair removed was tied to a rock and thrown in a deep hole in the river. I have been assured by individuals of tribes among whom I have worked, that none of their people would have used or even preserved hair removed in this way; this in spite of the fact that I have found in Yokuts graves numerous lengths of cord, made of twisted human hair.

3: Latta Y-5 (1923-1948)1949 NS29 Yokuts NS29

threw the basket in which she had been gathering acorns, sometimes also a child three or four years of age. This burden often reached a weight of about two hundred pounds.

During the summer of 1930 the writer saw one of the two then surviving *Nutunutu* (Noo-too'-noo-too) women carrying just such a load. She had waded Kings River in water almost to her waist and was just starting on a three mile trip to Del Piedra. Although she would undoubtedly have traveled the entire distance without resting, it is of interest to note that she willingly, and probably very gladly, accepted the offer of a ride.

The ahngush is carried with the large portion slightly below the level of the head and is held in place by a flat strap, called *sho-mit'-te*. A basket cap was often worn under the carrying strap. This protected the head of the moke. The Indians call this cap *wah-coo'-moots*. In the foothills the fiber for making carrying straps is obtained from a tall milkweed called by the Indians *hung'-uts hung'-uts*. Along the streams in the valley the fiber is often obtained from wild hemp, called *shock'h*, and sometimes from the fiber of the nettle, called *tro-we*. The strap is passed around the basket about half way between the top and bottom and across the upper portion of the forehead.

It will be appreciated by any one that great effort was necessary to bring a two hundred pound burden from the ground to the back of the moke. The basket was sometimes lifted upon a rock, or in the fork of a small tree, or upon a bank. The moke then placed her back against it, pulled the strap over her head, and walked away with it. Sometimes other Indian women, who were helping to gather the acorns, would lift the basket and place it upon her back.

Upon arriving at the rancheria, the acorns were placed in a granary. This granary was made of small branches which were bound into a circular form. The bottom of the granary was sometimes a foot or more above the ground. The granary was lined with grass and the acorns emptied into it. Some aged Indians have stated that this grass is both moth and squirrel repellent. The top might be eight or nine feet above the ground. These granaries would hold from ten to thirty bushels of acorns.

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in excellence of stitching, but in mathematical regularity of detail.

In addition to those designs which are worked into the basket itself, it is often embellished with the feather top-knots of quail. This was particularly true of the bottle-neck, or *aw'-suh*, of the Yokuts of Kaweah, Tule and Kern Rivers. In addition, various kinds of beads were sometimes fastened to the outside of the baskets.

It must be appreciated by readers that in an article of this nature, which has already exceeded proper limits, the subject of basketry designs can scarcely be approached. In addition to the forms already discussed there are countless numbers of designs reproducing almost every possible geometrical form. Some of them, we are told by basket makers, are used simply because they are *pah-yo'-me* (pretty).

It is of interest to note here that at least some of the basketry designs were used on the fabric made by the southern Yokuts. These tribes, the Tulamni, Tuhohi, Hometwoli and Yowlumne made many large circular mats or bags of fabric which probably were used for many purposes about their camps. However, the only uses of which we have definite knowledge are two, as shrouds for dead bodies and as linings for the sand basins in which acorn flour was leached. These fabric mats or bags were started of fiber thread much as were the blackberry gathering baskets and were twined, not woven. One piece of such fabric shows the rattlesnake pattern, worked in black thread. Although all existing specimens of Yokuts fabric have come from graves and are partially decayed, several designs can be distinguished on them. Material used in making Yokuts fabric is thought to be the fiber of the native hemp and/or milkweed.

How the native woman was able, without pattern or example in nature, to bring into being countless numbers of beautiful designs and, with no tools other than a bone awl and a sharp rock, to form them into a basket, can never be comprehended by the layman until he has watched that work for many weeks. The artistic taste and mathematics involved in this one Indian art alone shows more plainly than anything else we know about them that the mind of the Yokuts Indian was equal to many many things far beyond anything that we have appreciated.

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it was an occasion of great enjoyment and feasting, and in that way closely resembled the rabbit drive of the eighties, with its large cans of hot coffee, wagon loads of bread, and barbecued beeves.

Instead of the fence built by the white people, which was often two miles in length and made of wire netting or lath fencing, the Indians themselves formed the line. Instead of the pen into which the rabbits were driven by white people the Indians used a net made of milkweed string against which the rabbits ran, and where they were killed.

A detailed account of the rabbit drive as practiced by San Joaquin Valley Yokuts was furnished by T. J. Mayfield, who has been so freely quoted in these sketches and who was raised by the *Choinimne* tribe of Yokuts Indians. The Mayfield account follows:

"One of the great sports at the lake was the jack rabbit drive. The flat sage brush plains around the lake were fairly alive with jack rabbits, and the Indians used to plan a drive much like the drives later made by the white people, except that they used no pen or corral.

"A milkweed string net was made. This was about thirty feet long and four feet high. It was tied like an ordinary fish seine, but I never saw the Indians seine fish.

"The net was used for catching rabbits. The net was erected between two large sage bushes. Then a long line of Indians marched out at an angle from each end of it.

"The most of these Indians carried a stick about two feet long. When the two lines of Indians had formed wings several yards long the outer ends closed in and then they drove the enclosed rabbits toward the net.

"When an Indian came close enough to a rabbit he would throw his stick at it and would generally break its legs. But the most of the rabbits were killed at the net.

"As the rabbits ran along between the two lines of Indians they saw what they thought was an opening in the line at the net. They attempted to run through this opening, but hit the net and bounced back. Then they were promptly clubbed by one or two or three Indians who were hiding there for that purpose.

"It surely was exciting when the drivers had closed in. There would be hundreds of rabbits, and almost as many sticks flying in the air. Many of the rabbits would break through the

7:Powers J-5 (1871-1876) 1877 NS29 Yokuts NS29

liberally of their substance. But he was yet an unknown prophet. They were incredulous, and mostly laughed him to scorn, whereupon he would leave the village in high dudgeon, denouncing war upon their heads, and threatening them with a continuance of the drought another year far worse than before. Sure enough, the enraged Hopodno brought drought a second year, and the Indians were smitten with remorse and terror, believing him endowed with superhuman power; and when next year he made a second pilgrimage, offerings were showered upon him in abundance, and men heard him with trembling. He compelled them to pay him fifty cents apiece, American money, and many gladly gave much more. And he made rain.

As to their implements and weapons, there are some interesting particulars to be noted. Here, as everywhere on the Sacramento and Joaquin plains, the Indians make no bows, but purchase them all from the mountaineers. This is because they have no cedar. This wood is extremely brittle when dry, and is then the poorest possible material for bows; but by anointing it every day with deer's marrow while it is drying the Indian overcomes this quality and renders it the best. The bow is taken from the white or sap wood, the outside of the tree being also the outside of the bow. It is scraped and polished down with wonderful painstaking, so that it may bend evenly, and the ends are generally carved so as to point back slightly. Then the Indian takes a quantity of deer's sinew, splits it up with flint into small fibers, and glues them on the outside or flat back of the weapon until it becomes semi-cylindrical in shape. These strings of sinew, being lapped around the end of the bow and doubled back a little way, impart to it its wonderful strength and elasticity. The glue is made by boiling the joints of various animals and combining the product with pitch.

I saw a bow thus carefully made in the hands of an aged chief, and it was truly a magnificent weapon. It was about five feet long, smooth and shining—for when it becomes a little soiled the fastidious savage scrapes it slightly with flint, then anoints it afresh with marrow—and of such great strength that it would require a giant to bend it in battle. For lack of skins the owner carried it in a calico case. The string, composed of twisted sinew, was probably equal in strength to a sea-grass rope of three times its diameter.

7:Powers J-5 (1871-1876) 1877 NS29 Yokuts NS29

436 instance, goods which cost them at the store 85 they sell among themselves for 83, or thereabout. This is done by the old Indians, who consider an Indian dollar better than an American.

252 [173] [172] They say that, in remote times, they were accustomed to rub their acorns to flour on a stone slightly hollowed, like the Mexican *metate*, which was a suggestion of the mouse; but nowadays they pound them in holes on top of huge bowlders, which was a suggestion of the wiser coyote. On a bowlder in Coarse Gold Gulch, I counted eighty-six of these acorn-holes, which shows that they must have been used many centuries.

283 224 For snaring quail, rabbits, and other small game, they employ cords made of a kind of "wild flax" found in the Sierra. I presume this "wild flax" is milkweed (*Asclepias*).

272 Manzanita cider is made of a much better quality than the wretched stuff seen among the Wintūn. After reducing the berries to flour by pounding, they carefully remove all the seeds and skins, then soak the flour in water for a considerable length of time. A squaw then heaps it up in a little mound, with a crater in the center, into which she pours a minute stream of water, allowing it to percolate through. In this way she gets about a gallon an hour of a really delicious beverage, clear, cool, clean, and richer than most California apple cider. The Indians consume it all before it has time to ferment, so that they do not get intoxicated on it.

226 In the mountain streams which empty into Tulare Lake they catch lake trout, chubs, and suckers. Sometimes they construct a weir across the river with a narrow chute and a trap set in it; then go above and stretch a line of brushwood from one bank to the other, which they drag down stream, driving the fish into the trap. Another way is to erect a brushwood booth over the water, so thickly covered as to be perfectly dark inside; then an Indian lies flat on his belly, peering down though a hole, and when a fish passes under him he spears it. The spear is pointed with bone, and is two-pronged. Still another method is employed on Tule River and King's [481 501] River. An Indian takes a funnel-shaped trap in his teeth and hands, buoys himself on a little log, and then floats silently down the rapids, holding the net open to receive the fish that may be shooting up. On Tulare Lake they construct very rude, frail punts or mere troughs of tule, about ten feet

11: Gayton E-4 (no date) 1936 NS29 Yokuts NS29

pools. [Copy of Nov. 19: According to the size of it, it should show the number of 300 souls. . . . Their dialect is like that of Tukal.] Their captain and the greater part of the inhabitants, they told me, were at Chischa, 8 leagues away.

I continued eastward and reached a deep arroyo, where I found two huts with Indians. They came out to receive me, one of them being the captain of Chischa [Jonsps]. With his brother, wife, and other relatives he had retired this afternoon to weep during the night for the death of their relatives [copy of Nov. 19: two brothers and six sisters], since on the following day they would all celebrate, and various rancherías had been invited to the fiesta. He and his relatives helped to give water to the horses, since it was already 6 P.M.

[Copy of Nov. 19, Notes: From this point (Coyaipich) to the weeping place of Jonsps, Captain of Chischa, and from there to his ranchería, as to that of Telame, and as far as the edge of the Roblar, the land is admirable for its fertility, although rough because of its virginity. With its moisture, it only invites all to its cultivation to give abundant crops of wheat, grains, corn, and all the legumes, as long as it is irrigated. And the waters of San Gabriel can easily be carried in case of necessity. The pasture remains green and dry the year around. The woods are oaks of various species, willows, and poplars; there are some wild plants in the level parts, and in the arroyo and bogs. Moreover there abounds a shrub that they call wild hemp, very white and strong, of which the natives make their nets for fishing and (which) we (use) for sewing our shoes. Some of it is so fine it serves for sewing clothes.

The dialect is the same. The sustenance which they have is of acorns, very savory wild grain, and different kinds of seeds which this country naturally produces with great abundance. The river has several kinds of tasty fish, the little pools and arroyos a kind of anchovy which the Indians catch and dry in large quantities to keep for the rigorous times of winter. And they have pine nuts which they gather in the mountains.]

Having had news from the Choynocos that there was a Christian from San Miguel among them at the fiesta, and that they had two horses, I spoke to Jonsps. He immediately sent to tell the captain of the Choynoca to come, and to bring the Christian and horses. He [the captain] arrived at 10 P.M. with him and with a horse, begging me in his name and those of the other captains to forgive him. [He said] that they all invited me with his people to pass tomorrow at the fiesta which the captain of Chischa, Jonsps, was making. I accepted, and he returned at midnight to Chischa, 3 leagues away from Choinoco.

The two rancherías [copy of Nov. 19: three] that I have seen today all had their women and children hidden, but after they were informed that no priest accompanied me, they came out and presented themselves.

Friday, 29.—At 6 A.M. started the march to the north edges of the Sierra [along the foothills?] accompanied by the native captain, Jonsps, going to his Ranchería of Chischa where the reunion for the funeral celebration was to take place. Arrived at 8 P.M. There came out to receive me 7 captains from